

MULTIFUNCTIONAL COVER INTEGRATED INTO SUB-PANEL OF PORTABLE
ELECTRONIC DEVICE

ABSTRACT OF THE INVENTION

- 5 A cover for an opening in the housing of a portable electronic device that provides a function in addition to that of protecting the opening from dirt. The cover can be coupled to the housing so that it can move between a closed position within the housing's surface recess and an open position that allows access to the opening in the housing. In the closed position, the cover becomes
- 10 part of the housing and the of the device is generally unchanged. The cover can function as an antenna for wireless communication between the device and a network or access point, and it can contain circuitry for devices such as transmitter/receivers. The cover can also function as a display device, a speaker, or an alarm. Thus an existing cover that occupies space within the
- 15 volume of a handheld device can be utilized for expanding the functionality of the device while generally retaining the current form factor of the device.